CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended). A receiver circuit for a communications terminal, comprising:

a signal-receiving device providing K analog reception signals, K being greater than one; and

a signal pre-processing circuit configured downstream from said signal-receiving device;

said pre-processing circuit including:

an analog/digital converter device having K analog/digital converters connected in parallel for sampling the K reception signals independently of one another with a sufficient sampling rate and for providing K digital signals;

a multiplexer for multiplexing the K digital signals resulting in K multiplexed signals; and

a digital filter device for filtering the K multiplexed signals, said digital filter device having memory elements formed by shift registers of length K.

~~connected downstream from said analog/digital converter device; and~~

~~a conversion device configured between said analog/digital converter device and said filter device;~~

~~said filter device having N digital filters connected in parallel for filtering the K digital signals;~~

~~K and N being greater than zero; and~~

~~said conversion device being configured such that N is less than K.~~

2-5 (canceled).

6 (currently amended). The receiver circuit according to claim 1, wherein ~~one of said N digital filters~~ said digital filter device has an order of magnitude L between 5 and 20.

7 (currently amended). The receiver circuit according to claim 1, wherein ~~one of said N digital filters~~ said digital filter device has an order of magnitude L between 10 and 18.

8 (currently amended). The receiver circuit according to claim 1, wherein ~~one of said N digital filters~~ said digital filter device includes:

a plurality of single digital filters; and

sampling rate reduction circuits that are configured in series in an alternating fashion.

9 (original) The receiver circuit according to claim 1, wherein:

said signal-receiving device includes a single reception sensor outputting a single sensor reception signal; and

the K reception signals are generated by splitting the reception signal.

10 (original). The receiver circuit according to claim 1, wherein:

said signal-receiving device includes a single reception sensor outputting a single sensor reception signal; and

the K reception signals are generated by splitting the reception signal into an in-phase reception signal and a quadrature reception signal.

11-12 (canceled).

13 (currently amended). The receiver circuit according to claim 1, wherein said signal-receiving device includes a plurality of reception sensors, each of said plurality of said reception sensors has a directional reception characteristic for sensing radio signals in a predefined spatial segment.

14 (canceled).

15 (currently amended). A mobile station of a mobile radio system, comprising:

a signal-receiving device providing K analog reception signals, K being greater than one; and

a signal pre-processing circuit configured downstream from said signal-receiving device;

said pre-processing circuit including:

an analog/digital converter device having K analog/digital converters connected in parallel for sampling the K reception signals independently of one another with a sufficient sampling rate and for providing K digital signals;

a multiplexer for multiplexing the K digital signals resulting in K multiplexed signals; and

a digital filter device for filtering the K multiplexed signals, said digital filter device having memory elements formed by shift registers of length K.

~~a receiver circuit including:~~

~~a signal-receiving device providing K analog reception signals; and~~

~~a signal pre-processing circuit configured downstream from said signal-receiving device;~~

~~said pre-processing circuit including:~~

~~an analog/digital converter device having K analog/digital converters connected in parallel for sampling the K reception signals independently of one another with a sufficient sampling rate and for providing k digital signals;~~

~~a filter device connected downstream from said analog/digital converter device; and~~

~~a conversion device configured between said analog/digital converter device and said filter device;~~

~~said filter device having N digital filters connected in parallel for filtering the K digital signals;~~

~~K and N being greater than zero; and~~

~~said conversion device being configured such that N is less than K.~~

16-18 (canceled).

19 (new). A receiver circuit for a communications terminal, comprising:

a signal-receiving device providing K analog reception signals, K being greater than one; and

a signal pre-processing circuit configured downstream from said signal-receiving device;

said pre-processing circuit including:

an analog/digital converter device having K analog/digital converters connected in parallel for sampling the K reception signals independently of one another with a sufficient sampling rate and for providing K digital signals;

a stage containing K digital zero-inserting elements that are connected in parallel, each of said zero-inserting elements being fed with one of the digital signals and inserts K-1 zeros per sampling value of the digital signal into the digital signal; and

a digital filter device for filtering the digital signal with inserted zeros, said digital filter device having

memory elements formed by shift registers of length K.

20 (new). The receiver circuit according to claim 19, wherein said digital filter device has an order of magnitude L between 5 and 20.

21 (new). The receiver circuit according to claim 19, wherein said digital filter device has an order of magnitude L between 10 and 18.

22 (new). The receiver circuit according to claim 19, wherein said digital filter device includes:

a plurality of single digital filters; and

sampling rate reduction circuits that are configured in series in an alternating fashion.

23 (new). The receiver circuit according to claim 19, wherein:

said signal-receiving device includes a single reception sensor outputting a single sensor reception signal; and

the K reception signals are generated by splitting the

reception signal.

24 (new). The receiver circuit according to claim 19, wherein:

said signal-receiving device includes a single reception sensor outputting a single sensor reception signal; and

the K reception signals are generated by splitting the reception signal into an in-phase reception signal and a quadrature reception signal.

25 (new). The receiver circuit according to claim 19, wherein said signal-receiving device includes a plurality of reception sensors, each of said plurality of said reception sensors has a directional reception characteristic for sensing radio signals in a predefined spatial segment.

26 (new). A receiver circuit for a communications terminal, comprising:

a signal-receiving device providing K analog reception signals, K being greater than one; and

a signal pre-processing circuit configured downstream from

said signal-receiving device;

said pre-processing circuit including:

an analog/digital converter device having K analog/digital converters connected in parallel for sampling the K reception signals independently of one another with a sufficient sampling rate and for providing K digital signals;

a stage containing K digital zero-inserting elements connected in parallel, each of said zero-inserting elements being fed with one of the digital signals and inserts K-1 zeros per sampling value of the digital signal into the digital signal; and

a digital filter device for filtering the digital signal with inserted zeros, said digital filter device having memory elements formed by shift registers of length K.